

125 SUMMER STREET BOSTON MA 02110-1618

T 617 443 9292 F 617 443 0004 WWW.BROMSUN.COM


BROMBERG &amp; SUNSTEIN LLP

RECEIVED  
CENTRAL FAX CENTER

APR 13 2009

## FACSIMILE

TO Commissioner for Patents  
Examiner Lamprecht  
Art Group Unit: 3737

FROM Samuel J. Petuchowski 

PHONE

RE Interview Request

OUR FILE 2895/136 YOUR FILE Patent Application No. 10/717,437  
Filing Date: Nov. 19, 2003  
Inventor(s): Boppart et al.

FAX 571-273-8300

PAGES 3 (INCLUDING THIS SHEET)

DATE 4/13/2009

## COMMENTS

Please see the attached.

PLEASE NOTIFY BROMBERG &amp; SUNSTEIN LLP AT (617) 443-9292, IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION.

THIS TRANSMITTAL IS INTENDED ONLY FOR THE ADDRESSEE, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED OR CONFIDENTIAL. IF THE RECIPIENT OF THIS TRANSMITTAL IS NOT THE ADDRESSEE, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE.

02895/00136 1065945.1

002  
RECEIVED  
CENTRAL FAX CENTER  
APR 13 2009

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Boppart et al.	Attorney Docket:	2895/136
Serial No:	10/717,437	Art Group Unit:	3737
Date Filed:	Nov. 19, 2003	Examiner Name:	Lamprecht, Joel
Invention:	<b>Nonlinear Interferometric Vibrational Imaging</b>		

**INTERVIEW REQUEST**

This Request is submitted (by facsimile to (571) 273-8300), in lieu of USPTO Form PTOL-413A, to lay out proposed subject matter for discussion during a telephone interview requested between Examiner Lamprecht and Applicants' undersigned representative, Sam Petuchowski.

Claims 1, 3-37 and 40 are currently pending in the Application, and all stand rejected, now in a third office action, as obvious over Izatt (US 6,002,480) in view of Faris (US 5,451,785).

None of the foregoing office actions (October 9, 2007, June 25, 2008, and January 22, 2009) appears to address a fundamental feature of the present invention which, when appreciated, should offer ample distinction over the cited art, and provide fir allowance of the pending claims: Scattering of light by vibrational modes is an inelastic scattering process; the energy (and thus the frequency/wavelength) of the scattered photon changes in the course of the scattering event.

Correlation of scatter signals with PUMP radiation is, of course, the essence of optical coherence tomography, and allows depth resolution, etc. However, that is not what is being claimed. There is no teaching in Izatt, with or without Faris, of correlation

Appl. No. 10/717,437  
Applicants' Request for Telephone Interview, dated April 13, 2009

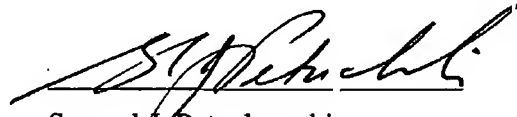
with a probe beam, generated through a non-linear process, that shares coherence (over an appropriate length scale) with the beam scattered from the sample.<sup>1</sup>

Applicant's representative proposes a telephone interview in which we step through the claim elements of claim 1, carefully identifying the first, second, third, and fourth sets of electromagnetic radiation. It will become apparent, in Applicant's view, that Izatt, alone or in combination with Faris, does not have a beam (the second set of electromagnetic radiation) that is generated by a non-linear process and that shares coherence (over some coherence length) with the stimulated scatter radiation scattered from the sample (the fourth set of electromagnetic radiation).

Nor, with respect to the device claims, does Izatt (with or without Faris) suggest optics for generating a reference beam, or a reference generator, as taught and required by the present application.

In anticipation that a discussion will be useful for resolving outstanding issues, Applicants' undersigned representative will call to schedule an interview.

Respectfully submitted



Samuel J. Petuchowski  
Registration No. 37,910

BROMBERG & SUNSTEIN LLP  
125 Summer Street  
Boston, MA 02110-1618  
Tel: 617 443-9292  
Fax: 617 443-0004

02895/00136 1026931.1

<sup>1</sup> Note: The "reference" to which Izatt refers is merely a disjoint laser beam used for interferometer calibration, and not for purposes of correlation with sample scattering.